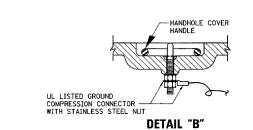
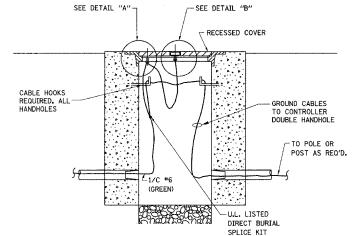


# UL LISTED GROUND COMPRESSION CONNECTOR ANTI-CORROSION COMPOUND SHALL BE APPLIED ON ALL BOLT/ CONNECTION ASSEMBLIES DETAIL "A" -STAINLESS STEEL NUT AND 2 STAINLESS





HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)

(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL) HEAVY DUTY COPPER COMPRESSION - EXISTING HANDHOLE -GROUNDING CABLE (PAID FOR SEPARATELY) FRAME AND COVER

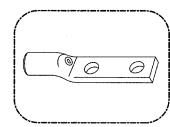
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

### NOTES:

#### GROUNDING SYSTEM

- SECTION COUNTY 344 2007-036 TS COOK STA. TO STA. FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT
- 1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP. NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.), GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS. THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



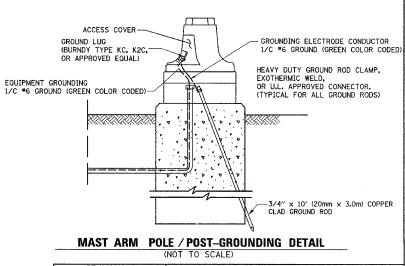
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

#### NOTES:

· ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED. GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	ILLINOIS DEFANTMENT OF TRANSFORTATION	
		DICTD	ICT 1
		DISTRICT 1	
		STANDARD TR	AFFIC SIGNAL
		DESIGN	DETAILS
		SCALE: NOT TO SCALE	DRAWN BY: RWP DESIGNED BY: DAD
		DATE 1-01-02	CHECKED BY: DAZ SHEET 3 OF 4
			TS05

-FUSE, KLKR 1/4 A TRAFFIC SIGNAL CONTROLLER CABINET -LOCK, HASE -PADLOCK, FURNISHED BY CONTRACTOR, KEYED TO DISTRICT 1 REQUIREMENTS - CTRCLITT NEUTRAL GROUND BUS BUS -COMPRESSION LATCH, TYP. (2 MIN. REQ'D) -1 1/4" (30mm) DIA. COUPLING -STRAIN RELIEF COUPLING --- SECONDARY ELECTRICAL SERVICE BY UTILITY CO. -2/C (NEUTRAL-WHITE, PHASE-BLACK) -1/C GROUND (GREEN COLOR CODED)

INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.

2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

# ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

0

DISCONNEC

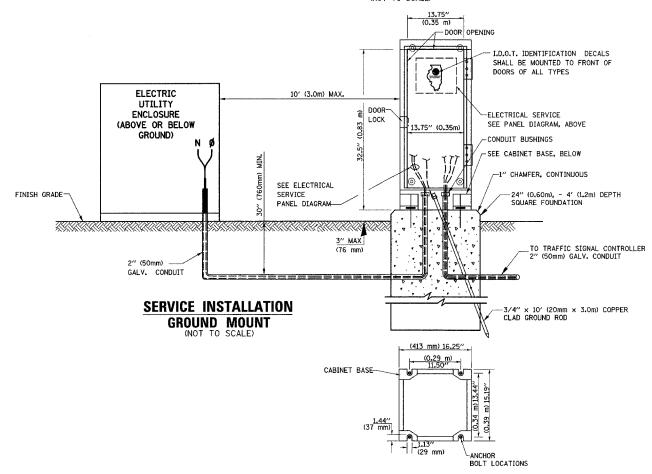
DISCONNECT

-STANDOFF

-PANELBOARD

## SERVICE INSTALLATION POLE MOUNT (SHOWN)

NOTES:



0

TO GROUND ROD-

FLECTRICAL SERVICE TO TRAFFIC SIGNAL CONTROLLER

1/C #6 (GREEN)

3/4" (20mm) GALV. CONDUIT-

(SEE ALL CABLE PLAN, FOR ALL CABLE SIZES)

SURGE ARRESTOR

-DDESCHDE

CONNECTOR, TYP.

TOP & BOTTOM AS PER

CABINET, SHEET ALUMINUM

CONTINUOUS PIANO HINGE-

POLE MOUNTED SERVICE

POWER INDICATOR LIGHT

-INTERNALLY MOUNTED FOR-

GROUND MOUNTED SERVICE

CARINET OUTSIDE

MANUFACTURER

FABRICATION

DIMENSIONS L 6" × W 12" × H 14" L (150mm) × W (300mm) × H (355mm)

**CABINET - BASE BOLT PATTERN** 

(NOT TO SCALE)